



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/010,132	12/06/2001	Yuanlong Wang	MS-01CXT0161M	4787	
7	590 04/30/2004		EXAMI	EXAMINER	
Jake J'maev			KNOLL, CLIFFORD H		
12616 Lewis Ave Chino, CA 91710			ART UNIT	PAPER NUMBER	
Cimio, Cri	1710		2112		
			DATE MAILED: 04/30/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No	Applicant(s)				
	10/010,132	WANG ET AL.				
Office Action Summary	Examiner	Art Unit				
	Clifford H Knoll	2112				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on <u>06 D</u>	ecember 2001.					
2a) This action is <b>FINAL</b> . 2b) This action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-19</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-19</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)☐ The specification is objected to by the Examine	r					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
•	priority under 35 H S C & 110(a)	(d) or (f)				
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
The state of the s						
		•				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	te				
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)     Paper No(s)/Mail Date	6) Other:	atent Application (PTO-152)				
J.S. Patent and Trademark Office						
PTOL-326 (Rev. 1-04) Office Ac	tion Summary	Part of Paper No./Mail Date 2				

Art Unit: 2112

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2, 10, and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, "the type of transfer" lacks clear antecedent basis.

In claims 10 and 19, "the length" lacks clear antecedent basis.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Pekkala (US 2002/0172195).

Art Unit: 2112

Regarding claim 1, Pekkala discloses converting native bus signals from a first computer module to a first point-to-point interface, conveying the bus signals using the first point-to-point interface to a bus emulator (e.g., paragraph [0166]), conveying the bus signals from the bus emulator using a second point-to-point interface to a second computer module, and converting the bus signals received at the second computer to a native form (e.g., paragraph [0169]).

Regarding claim 2, Pekkala also discloses monitoring the native bus signals in order to identify the beginning of a data transfer cycle, and accepting data and address signals from the native bus and serializing these (e.g., paragraph [0008]), together with an indication of the type of transfer identified (e.g., paragraph [0166]).

Regarding claim 3, Pekkala also discloses receiving the bus signals from the first point-to-point interface in the bus emulator; translating the first point-to-point interface received in the bus emulator to a bus structure internal to the bus emulator; conveying the bus signals received in the bus emulator by way of the first point-to-point interface onto said bus structure (e.g., paragraph [0166]); and translating the bus signals carried on said bus structure to a second point-to-point interface (e.g., paragraph [0055]).

Regarding claim 4, Pekkala also discloses granting said bus structure to the first point-to-point interface if said bus structure is available; and propagating the bus signals translated from the first point-to-point interface onto the bus structure if the bus structure is granted to said first point-to-point interface (e.g., paragraph [0150]).

Regarding claim 5, Pekkala discloses plurality of point-to-point interface units comprising a computer module interface and a point-to-point interface; plurality of

Art Unit: 2112

Ø

computer modules connected to the computer module interface of the plurality of point-to-point interface units; and bus emulator connected to the point-to-point interface of the plurality of point-to-point interface units (e.g., paragraph [0055]).

Regarding claim 6, Pekkala also discloses the point-to-point interface units comprise parallel-to-serial conversion units that operate upon detecting the beginning of a data transfer cycle presented to the computer module interface (e.g., paragraph [0008]), and wherein the parallel-to-serial conversion units accept a data field and an address field and a cycle-type indicator from the computer module interface (e.g., paragraph [0166]).

Regarding claim 7, Pekkala also discloses the plurality of point-to-point interface units comprise high-current parallel drivers (e.g., paragraph [0010], "multiple IB channel adapters") capable of propagating data, address and data transfer cycle requests (e.g., paragraph [0166]).

Regarding claim 8, Pekkala also discloses the plurality of point-to-point interfaces interconnected by an internal bus (e.g., paragraph [0009]).

Regarding claim 9, Pekkala also discloses the arbiter for granting access to the internal bus to one of the plurality of point-to-point interfaces (e.g., paragraph [0150]).

Regarding claim 10, Pekkala also discloses a cascade port that connects to the internal bus and can be used to extend the length of the internal bus (e.g., paragraph [0010]).

Regarding claim 11, Pekkala discloses a point-to-point interface (e.g., paragraph [0008]).

Art Unit: 2112

Regarding claim 12, Pekkala also discloses parallel-to-serial conversion unit that operate upon detecting the beginning of a data transfer cycle presented to the computer module interface (e.g., paragraph [0008]), and wherein the parallel-to-serial conversion units accept a data field and an address field and a cycle-type indicator from the computer module interface and delivers a serial output comprising a data transfer cycle to the point-to-point interface (e.g., paragraph [0166]).

Regarding claim 13, Pekkala also discloses the point-to-point interface comprises high-current parallel drivers capable of propagating data, address and data transfer cycle requests (e.g., paragraph [0010]).

Regarding claim 14, Pekkala discloses a computer module interface and a point-to-point interface (e.g., paragraph [0009]).

Regarding claim 15, Pekkala also discloses parallel-to-serial conversion unit that operate upon detecting the beginning of a data transfer cycle presented to the computer module interface (e.g., paragraph [0008]), and wherein the parallel-to-serial conversion units accept a data field and an address field and a cycle-type indicator from the computer module interface and delivers a serial output comprising a data transfer cycle to the point-to-point interface (e.g., paragraph [0166]).

Regarding claim 16, Pekkala also discloses the plurality of point-to-point interface units comprise high-current parallel drivers capable of propagating data, address and data transfer cycle requests (e.g., paragraph [0010]).

Regarding claim 17, Pekkala discloses an internal bus; and plurality of point-to-point interfaces interconnected by the internal bus (e.g., paragraph [0008], "IBA").

Art Unit: 2112

Regarding claim 18, Pekkala also discloses an arbiter for granting access to the internal bus to one of the plurality of point-to-point interfaces (e.g., paragraph [0150]).

Regarding claim 19, Pekkala also discloses a cascade port connected to the internal bus and can be used to extend the length of the internal bus (e.g., paragraph [0010]).

## Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Johnson (US 6591310) and Gasbarro (US 2002/0071450) both teach particular implementations of the point-to-point interface.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clifford H Knoll whose telephone number is 703-305-8656. The examiner can normally be reached on M-F 0630-1500.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark H Rinehart can be reached on 703-305-4815. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2112

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

chk